

Type host.—*Tropidurus peruvianus* (a lizard).

Type locality.—Verrugas Cañon, Lima, Peru.

Type slide.—Cat. No. 987, U. S. N. M.

Described from several specimens taken from type host by R. C. Shannon, April 15, 1928. This species is very distinct in the type of chelicerae, having 3-4 small teeth on dorsal margin. The palpal claw is similar to that of *irritans*, but *irritans* has only a single dorsal tooth on each chelicera.

Trombicula oregonensis, new species.

Palpi with second segment broadly rounded on outside; first palpal seta with many barbs, second with several barbs, third with from two to four barbs; palpal claw bifurcate, inner prong being much the largest. Chelicerae each with a single dorsal tooth and apparently with a single ventral tooth. Dorsal plate much broader than long, front margin about straight, posterior margin outwardly curved; pseudostigmata situated much nearer the posterior margin of dorsal plate than the front margin; pseudostigmatic organs long, flagelliform, simple. Eyes situated about their diameters from the lateral margins of dorsal plate, front and posterior corneas subequal. Dorsal setae forty, not counting a lateral posterior pair. Dorsal spine of tarsus I situated its length from the base of the segment; dorsal spine of tarsus II sharper than the one on tarsus I and similarly situated. Last pair of legs each with at least four long, simple, tactile setae.

Length of unengorged larva, 0.30 mm.; width, 0.18 mm.

Type host.—A mole.

Type locality.—Corvallis, Oregon.

Type slide.—Cat. No. 990, U. S. N. M.

Described from two lots of material as follows: "Five specimens taken from type host at Corvallis, Oregon, June 3, 1912, by A. J. Stover and eleven specimens taken from type host at the same place May 17, 1912, by a student. This species is most nearly related to *Trombicula bruyanti* (Oudemans) but differs from Oudemans's species in having the pseudostigmatic organs simple instead of pectinate and in having forty dorsal setae instead of twenty-eight.

A NEW VARIETY OF INSCUDDERIA WALKERI HEBD. FROM VIRGINIA (ORTHOPTERA: TETTIGONIIDAE).

BY A. N. CAUDELL.

At Cape Henry, Virginia, the extensive sand dunes annually encroach some distance into a large cypress swamp, thus gradually burying the tall cypress trees growing in the swamp. The tops of dead trunks project above the sand dunes here and there as monuments, testifying to the former grandeur of these

ancient trees. The dunes end abruptly, dropping in an incline of forty-five degrees into the swamp some forty to eighty feet below, and on this steep incline the tops of partially buried, but still living, cypress trees are found. These tops afford an easy and unique opportunity for the exploration of the insect fauna of the cypress, which under normal conditions is well nigh inaccessible.

While investigating this fauna July 15-25, 1927, Mr. August Busck collected some slender green katydids, the color of which blended effectively with the foliage of the cypress. Additional specimens of this insect were obtained two months later, September 20, 1927, on cypress in the identical locality, by Dr. E. A. Chapin. These specimens prove to represent a variety of *Inscudderia walkeri* Hebd., which I take pleasure in naming in honor of my friend, Mr. Busck, who repeatedly has added to our knowledge of American Orthoptera by his assiduous collecting, although he is primarily interested in a very different group of insects, the Microlepidoptera.

Inscudderia walkeri var. *buscki*, new species.

Size about as in *taxodii* Caud., decidedly smaller than *walkeri* Hebard; in color agreeing with both the above species in the characteristic marking of the tegmina, etc.

The male has the last dorsal segment of the abdomen almost exactly as described and figured by Mr. Hebard for *walkeri*, and the terminal tooth of the cercus also agrees in length and shape with that of Hebard's species; the decidedly larger size and the northern habitat will, however, serve to distinguish it from the typical southern form as described and figured in Hebard's paper of 1925.¹ The supraanal plate, which, as in other species of this genus, is deflexed beneath the last dorsal segment of the abdomen and thus generally seen with difficulty, is elongate, about as long as one of the cerci and so deeply sulcate dorsally as to appear divided for almost its entire length. The female shows no differentiating characters of importance; the superior valves of the ovipositor are either as long as, or very slightly longer, than the inferior ones, there being but little variation in the specimens examined, in this particular apparently agreeing more nearly with that of *taxodii*, as noted in the description by Hebard in the above noted article.

Measurements (in millimeters): Length, pronotum, ♂ 4, ♀ 4.5; tegmen, ♂ 25, ♀ 26.5; posterior femur, ♂ 20.5, ♀ 23; ovipositor, 8; width, pronotum posteriorly, ♂ 3, ♀ 3; tegmen at apical fourth, ♂ 3, ♀ 3.5; posterior femora at widest point, ♂ 2, ♀ 2.5.

Holotype, ♂, Cape Henry, Virginia, July 20, 1927, August Busck, collector; allotype, ♀, same data; paratypes as follows: One adult female and a large female nymph, same data as the holotype and allotype; two male and six female adults from same

¹Trans. Amer. Ent. Soc., vol. li, p. 321-330, pls. x-xi.

locality on September 20, 1927, E. A. Chapin, collector. All taken on cypress, *Taxodium distichum* Richard.

Type material in the collection of the U. S. National Museum.

Type catalogue No. 40719, U. S. N. M.

The measurements in millimeters of typical *walkeri*, as given by Hebard, are as follows: Length, pronotum, ♂ 4.8, ♀ 5.1; tegmen, ♂ 30.4, ♀ 31.8; posterior femur, ♂ 23.8, ♀ 26.2; width, tegmen, ♂ 5, ♀ 5.2.

Were it not for the geographical features involved and the rather decided difference in size, this might be considered as typical *walkeri*. In consideration of the above features, however, there seems little doubt of the varietal distinctness of the form here noted.

In order that this beautiful little katydid may be recognized by interested persons other than orthopterists, the following brief nontechnical description is given:

A small slender katydid barely one and one-half inches in length, inclusive of the wings. The outer wings, or tegmina, are narrow, about six times as long as broad, and of the semi-opaque horny texture usual in katydids. The under wings are broad, membranous and transparent with the tips tinged with green and, when folded, project a short distance beyond the outer wings. The legs are long and slender, especially the hind ones, the femora, or first half, of which reaches the tips of the closed outer wings. The female bears at the tip of her body a short, flat up-curved egg-laying organ called the ovipositor; this is about one-third as long as the outer wings and about one-fourth as broad as long, and the tip is pointed. From the lower part of the tip of the abdomen of the male is a narrow gently up-curved prolongation extending well beyond the rest of the abdomen and above this is a pair of short apically swollen projections with an apical incurved tooth on each.

The general color is green with the outer wings marked lengthwise with a couple of narrow black streaks and with a few short diagonal marks of the same color projecting from the upper edge of the closed wing.

So nicely do specimens of this insect blend with the colors of the cypress foliage on which they occur they are very liable to be overlooked unless especially sought for.

A NEW INJURIOUS PINE MOTH (LEPIDOPTERA: GELECHIIDAE).

By AUGUST BUSCK, U. S. Bureau of Entomology.

Recurvaria condignella, new species.

Second joint of labial palpi black, slightly sprinkled with white scales on the inner sides and with apex narrowly pure white; terminal joint white with ex-